

November 17, 2008

City of Frisco 11300 Research Road Frisco, Texas 75034 Attn: Melody Emadiazar

Water Education Coordinator

SUBJECT: Contract for Services Agreement # 570522

Dr. Frank E. Gilstrap, our PI

Dear Ms. Emadiazar:

Enclosed please find two execution copies of Contract for Services Agreement # 570522. This Contract for Services is under the prime agreement from the Texas Commission on Environmental Quality (TCEQ) and is entitled "Development and Production of Water Conservation Videos". This agreement is in the amount of \$8,000.00; with a period of performance from 12/1/08-11/30/2009. The prime agreement is for your reference.

If you approve the terms of the Contract for Services, please have the authorized representative sign both copies of the agreement. Return both partially executed copies of the Contract for

Services for our use to:

Texas AgriLife Research
Contracts and Grants

2147 TAMU

College Station, TX 77843-2147.

If you have any questions, please contact Bill Hawke at (phone) 979-458-4682, (fax) 979-862-7775, or (e-mail) <u>WPHawke@ag.tamu.edu</u>. We appreciate the opportunity for cooperative research and trust the results will be mutually beneficial. If we can be of further assistance, please let us know.

Sincerely,

FOR Diane M. Gilliland

Assistant Director for Research Administration

Texas AgriLife Research

DMG/wph Enclosures

cc: Dr. Frank E. Gilstrap Mr. Clint Wolfe

File: 570522

AGREEMENT No. 570522

Contract for Services
between
Texas AgriLife Research
The Texas A&M University System
and
City of Frisco

Whereas, Texas AgriLife Research has undertaken the project entitled the Trinity River Basin Environmental Restoration Initiative,

Whereas, the City of Frisco represents that it is ready, willing, and able to participate in the project and agrees that all applicable provisions and requirements of TCEQ grant agreement number 582-8-77062 (Attachment A) will flow down to the City of Frisco,

NOW THEREFORE, the parties hereto mutually agree as follows:

A ------

The City of Frisco shall perform the effort as set forth in its proposal entitled *Development and Production of Water Conservation Videos*, which is incorporated herein and attached hereto as Attachment B.

This agreement shall commence effective December 1, 2008 and terminate on November 30, 2009.

The City of Frisco will be compensated an amount of Eight Thousand Dollars (\$8,000.00). Five Thousand Dollars (\$5,000.00) will be payable upon this agreement being fully executed. Three Thousand Dollars (\$3,000.00) will be paid on the six month anniversary of the project.

Funds for this project are provided by TCEQ therefore, in no event shall Texas AgriLife Research be liable to for payment of funds not provided by TCEQ.

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WHEREFORE, the parties have caused this agreement to be executed as set forth below.

City of Frisco	Texas AgriLife Research Texas A&M University System
	De Made A. Harrey
	Dr. Mark A. Hussey
Title	Director, Texas AgriLife Research
Date	Date

Attachment B

Project Proposal

1. Project Name: Development and Production of Water Conservation Videos

2. Applicant: City of Frisco

3. Tax ID Number: 75-6000531

4. Project Lead: Melody Emadiazar

5. Project Lead Title: Water Education Coordinator

6. E-mail Address: memadiazar@friscotexas.gov

7. Street Address: 11300 Research Road, Frisco, TX 75034

8. Telephone and Fax numbers: (972) 292-5814 Ph (972) 292-5891 Fax

9. Project Type: Water Quality (); Water Conservation (x); Both ()

10. **Key Project Activities:** Check all types of activities to be included in the project. Quarterly and final project reports are the minimum reporting requirements.

Education (x); Planning (x); Demonstration (x)

11. Geographic Scope: City (); County (); Regional (x); Watershed (); Statewide (x)

The information would be produced to address the North Texas region. However, the videos would most likely be applicable (and made available) to any and all state entities.

- 12. **Project Period:** State a specific time period between September 2008 and September 2010 for accomplishing the work. The project would be completed within one year from receiving this grant. Assuming that the grant is awarded by October 31, 2008, then the project would be completed by October 31, 2009.
- 13. Funds Awarded: \$8,000
- 14. **Project Goal:** Through the use of short 5 minute videos on easily adoptable irrigation techniques, the goal is to:
 - ♦ Reduce Overall Water Consumption
 - ♦ Protect and Extend Current Water Supplies
 - ♦ Address/Reduce Peak Season Use
 - ♦ Educate the public by providing easy to follow "how-to" videos focusing on specific water conservation measures.
- 15. **General Project Description:** Grant funds in the amount of \$10,000 are requested to produce the second two (out of a series of six) 5-minute videos that address water efficiency as it applies primarily to outdoor irrigation. Emphasis will be on elementary, hands-on demonstrations of practical steps homeowners can take to increase the efficiency of their landscape irrigation.
 - ♦ Topic 3: Seasonal Adjustments for Irrigation Controllers
 - ♦ Topic 4: Irrigation, Cycle/Soak Method, Hiring a Professional Irrigator, Self-Audits

An **innovative feature** of these videos would be the visual "how-to" demonstration using easy to see and understand show-and-tell style communication. After extensive research, the Regional Water Conservation Coordinators of North Texas believe that this will build upon previous educational outreach efforts such as brochures, tip lists and website information. In addition, local experts (Texas Irrigation Association, Texas Nursery and Landscape Association, AgriLife Research – TX A&M,

etc.) will be utilized during video taping rather than any particular city staff members. This will give the information added credibility and statewide applicability.

The **potential improvement** would most assuredly be in the realization of a reduction in overall water use especially during the summer peak season. The statewide water goal of 140 gallons per capita per day will only be realized if summer water use for landscape irrigation is strongly addressed and emphasized in all water education campaigns. Much of the existing material that addresses this issue is in written form in the way of brochures and print ads. Educators know that there is a big difference in telling someone what to do and showing them what to do. Many learners greatly benefit from "seeing" rather than just reading. Also, because of the availability and effectiveness of municipal cable television channels, as well as streaming video on city websites, this provides an effective communication tool to educate the general public.

The content of these videos will be produced in a manner that creates timeless education pieces that can be used for many years. The visual information will be general in nature (native plants, irrigation system basics, etc.) which will render them useful and continuously pertinent. The project will be **sustained** by making the materials widely available by web and DVD copies to any interested parties.

The Regional Water Conservation Coordinators of North Texas are committed to producing these videos. The group has already developed the script outlines, as well as story boards to assist in production. They will continue to seek additional **funding commitments** (grants, cooperative purchase, organization sponsorship, etc.) for the remaining four subjects for this video series:

Topic 1: In/Outdoor General Conservation Overview, TX Native/Drought Tolerant Plant Selection

Topic 2: Basic 101: Maintenance Elements for Automatic Irrigation Systems

Topic 5: Smart Technology (Drip Irrigation, MP Rotators, etc.)

Topic 6: Smart Controllers

The production cost for the videos is estimated at \$5,000 each which includes considerable in-kind or matching funds. The City of Plano's Television Network (PTN) has agreed to shoot, edit, and produce the video segments at a significantly reduced rate and will provide DVD or web-based copies to interested parties at cost. In addition, the planning and production (script writing, story boarding, etc) will be done by Regional Water Conservation Coordinators of North Texas. The proposed timeline for project activities is as follows:

Schedule for Project Activities:

September – October 2008	Receive grant and complete video scripts
October 2008	Finalize filming locations & begin video taping.
November – January 2009	Tape local specialists and record voice over information
January – April 2009	Video editing process and completion (voiceovers, music, misc. footage)
April 2009 – July 2009	Begin work on Video #3-4 with irrigation & local specialist footage
July 2009- October 2009	Video editing process and completion (voiceovers, music, misc. footage)

16. NPS Pollutant Source(s) or Water Conservation Practice(s) to be Addressed:

Video 3: Seasonal Adjustments for Irrigation Controllers

This video will address the need for seasonal irrigation adjustments. While it is important that an irrigation system have both good design and distribution uniformity, a well-designed system should never rely on an automatic irrigation controller with a "set it and forget it" schedule. Most homeowners are not fully aware of how to manage an irrigation system to meet seasonal watering

needs. Showing homeowners how to make minor adjustments to their irrigation controller's programming, especially in the spring and fall, enables them to maximize the water—use efficiency of their irrigation system and better care for their plant material.

Video 4: Irrigation, Cycle/Soak Method, Hiring a Professional Irrigator, Self-Audits

This video will demonstrate the cycle soak method of irrigator, how to perform a residential water audit and the best way to go about selecting an irrigation contractor. An enormous amount of water is wasted due to irrigation runoff. The clay soil in North Texas absorbs water at a very slow rate. When water is applied too quickly the result is runoff. The cycle soak method of irrigation is recommended by landscape and irrigation professionals as the most efficient way to irrigate. Basically, it is a method by which water is applied in small amounts over a period of several hours. This method of irrigation allows water to seep deep into the ground promoting long healthy plant roots that will be protected from the hot summer sun.

Step by step instructions will be given to show homeowners how to perform an audit or operation check of their irrigation system. Subsequent videos will instruct them on how to make adjustments to their system to improve efficiency, save water and produce healthier plants.

In January 2009, HB 1656 will be in effect regarding the use of licensed irrigation contractors. This video will assist the consumer on the best methods to use when purchasing irrigation services. Resources will be provided as well as specific things to look for when shopping for irrigation services (i.e. a plan of the system, the types of equipment to be used, depth of trenching, license number, etc). This video will prove invaluable to any consumer considering the hire of an irrigation contractor.

17. Estimated Load Reduction(s) or Gallons of Water Conserved and Reference Method(s):

Water savings due to public information efforts are difficult to quantify. The Texas Water Development Board's 2004 *Water Conservation Best Management Practices Guide* cites the following potential water savings:

- Public adoption of irrigation BMPs are assumed to result in a 15 percent reduction in overall peak season water demand
- 5.5 gallons per day per device for low flow showerheads and faucet aerators
- ♦ 12.8 gallons per day per device for low flow toilets.

These savings are dependent on the adoption of irrigation techniques and the number of indoor low-flow devices installed.

18. Other Measures of Success and Effectiveness Monitoring: Describe goals -- activities and/or outcomes -- other than pollutant load reductions/gallons of water conserved which will be documented as measures or indicators of the progress and success of the project. For example, in an education project, a measure of success might be changes in behavior as indicated in a follow-up survey of workshop participants, number of participants in an event, etc.

We intend to employ a survey of video viewers on municipal websites utilizing Survey Monkey. There is consideration to create some type of participation incentive program which may include free tickets to local events or one time credit on water bill.

Track number of hits on website video streaming.

19. Applicant/Team Qualifications:

The Regional Conservation Coordinators of North Texas (RCCNT) began meeting in June of 2007. The group meets monthly to work cooperatively in the following areas:

- ♦ Share ideas and co-sponsor programs/events
- Conservation messaging that applies to all cities (general in nature).
- Cooperative development/purchases of education programs/materials.

Our first cooperative effort was completed in the Spring of 2008 with a full color brochure on outdoor water efficiency. The group worked closely with AgriLife Extension to produce a piece that supported the organization's Earth Kind program. The brochure has been widely used throughout the Metroplex and has been favorably received.

Plano and other RCCNT members utilize Texas AgriLife, Water IQ, Save Dallas Water, Water Wise, WaterSense, Water Use It Wisely and other programs to create public outreach materials to educate citizens and business owners. Cities have developed and adopted conservation plans based on model plans provided by their respective water wholesalers. Each community utilizes these materials to enhance programming that promotes water use efficiency. Materials produced by Texas AgriLife Extension, Water IQ, Save Dallas Water, Water Wise, Water Scene, and others are used in presentations, website development, brochure production, public outreach displays and public education classes and events.

These conservation specialists include representatives from 12 of cities that span across Collin and Dallas counties. These cities represent a population of approximately 2.7 million. The City of Plano has had a water conservation coordinator on staff for well over 10 years and has had vast experience in effective programming for the general public.

All members of the RCCNT are in direct contact with the general public regarding water conservation issues in their respective communities. There exists a vast amount of experience in nearly every aspect of water conservation programming. Members have experience in rebate programs, public education, technical retrofit equipment, leak detection, irrigation auditing, irrigation system design, installation, repair and retrofit, landscape architecture, rain water harvesting.

Members of RCCNT represent the following communities: Plano, Richardson, Frisco, Garland, Mesquite, McKinney, Allen, Dallas, Irving, Carrolton, Rowlett, NTMWD, Freese & Nichols and the Texas Water Development Board.

21. **Applicant Signature:** Type the name and title of an officer of your organization with authority to affirm a commitment of resources and matching funds needed to carry out the project as proposed. Complete with the signature of this authorized agent and a signature date.

Name: Melody Emadiazar

Title: Water Education Coordinator

Date: August 12, 2008